

IN THE CLAIMS

Kindly amend claims as follows:

1. (Original) An electrochemical lead-acid battery having an electrolyte containing an organic polymer and an ultra fine lignin having a particle size between about 0.01 and about 0.8 micron.
2. (Original) The electrochemical lead-acid battery of claim 1 wherein the ultra fine lignin has a particle size between 0.1 and about 0.6.
3. (Currently Amended) The electrochemical lead-acid battery of claim 1 wherein the organic polymer is at least one organic polymer selected from the group ~~comprising polyacrylic~~ consisting of polyacrylic acid or its copolymers, polyvinyl alcohol and ethylene glycol.
4. (Currently Amended) The electrochemical lead-acid battery of claim 1 wherein the electrolyte also contains at least one additional additive selected from the group of materials consisting essentially of indium, tin, lead sulfate, barium sulfate and mixtures thereof.
5. (Currently Amended) The electrochemical lead-acid battery of claim 4 wherein the electrolytes also contain ~~an~~ antimony as an impurity.
6. (Currently Amended) The electrochemical lead-acid battery of claim 1 wherein the polymer is ~~present in~~ an aqueous solution wherein the polymer is between about 0.1% and 13% in water.
7. (Original) The electrochemical lead-acid battery of claim 6 wherein the organic polymer is polyvinyl alcohol.

8. (Currently Amended) The electrochemical lead-acid battery of claim 2 wherein the electrolyte also contains at least one additional additive selected from the group of materials consisting essentially of indium, tin, lead sulfate, barium sulfate, and mixtures thereof.

9. (Currently Amended) The An electrochemical lead-acid battery having an electrolyte containing at least one organic polymer selected from the group consisting of polyacrylic acid or its copolymers, polyvinyl alcohol and ethylene glycol and wherein the polymer is ~~present in an about an aqueous solution where in~~ the polymer is between 0.1% 0.1% and about 13% in water.

10. (Currently Amended) The electrochemical lead-acid battery of claim 9 wherein the electrolyte also contains at least one additional additive selected from the group of materials consisting essentially of indium, tin, lead sulfate, barium sulfate and mixtures thereof.

11. (Original) The electrochemical lead-acid battery of claim 10 wherein said additional additive is present in an amount between about 0.01% and about 0.1% per 12-Volt 50-Ampere battery.

12. (Original) The electrochemical lead-acid battery of claim 10 wherein the additional additive is lead sulfate or barium sulfate.

13. (Original) The electrochemical lead -acid battery of claim 10 wherein the additional additive is indium.

14. (Currently Amended) A process of ~~charging~~ discharging a lead-acid battery having a charge sufficient for sustaining a high current of at least 0.3C for a

time period of at least five minute and the battery containing an electrolyte, active components and comprising ~~the steps a adding to the electrolyte of the battery~~ at least one organic polymer, ~~and by comprising the step of~~ discharging the battery at a high current rate of at least 0.3C for at least five minutes.

15. (Currently Amended) The process of claim 14 where ~~step a the~~ electrolyte also contains at least one additional additive selected from the group of material consisting essentially of indium, tin, lead sulfate, barium sulfate and mixtures thereof ~~is added to the electrolyte~~.

16. (Canceled)

17. (Currently Amended) The process of claim 14 wherein after the ~~discharging step a~~ an additional ~~step a~~ is added charging the battery at a high current rate of at least 1.5C.

18. (Currently Amended) The process of claim 14 wherein an ultra fine lignin is added to the electrolyte before the discharging of step a.

19. (Original) The process of claim 17 wherein the discharging and charging is repeated more than twice providing a plurality of cycles.

20. (Currently Amended) The process of claim ~~19~~ 18 wherein at least one additional additive selected from the group of materials consisting essentially of silicone compounds, indium, tin, lead sulfate, barium sulfate and mixtures thereof ~~additives are~~ is added to the electrolyte ~~along with active components~~ before the ~~initial~~ discharging of the battery.